

BONADUCECYTHERIDAE McKENZIE, 1977:
A SUBJECTIVE SYNONYM OF PSAMMOCYTHERIDAE
KLIE, 1938 (OSTRACODA: PODOCOPIDA:
CYTHERACEA)

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Abstract.—Comparison of material described from the Galapagos with that described earlier from Malta indicates that Bonaducecytheridae McKenzie 1977, is a junior synonym of Psammocytheridae Klie 1938.

Recently, Gottwald (1980) described *Psammocythere hartmanni* from Santa Cruz in the Galapagos Islands. He noted that while confident of the family in which the species belonged (Psammocytheridae Klie 1938) he was hesitant about the generic determination but did not intend to establish a new genus because he had only one specimen (a mature male).

Earlier, McKenzie (1977) had described the new family Bonaducecytheridae, type-species *Bonaducecythere hartmanni* McKenzie, 1977, on the basis of material collected from the island of Malta, in the Mediterranean.

Comparing the Maltese and Galapagos taxa it is clear that they have many characters in common. In both, the shells are small and flattened ventrally with an anterior gape; the line of concrescence is irregular; muscle scars include 3 adductors plus 1 frontal scar; antennules are 6-segmented, with the 4th segment carrying 4 dorsomedial and 6 dorso-distal bristles, while the 5th segment is bare; the antennae have 3 terminal endopodial claws and 3-jointed flagella; the mandibles have epipods with only 1-2 Strahl(en); maxillae epipods have 2 downward-pointing setae; the male P1's have curved club-like clasping ungues; P2s and P3s are slender with 4-segmented endopods. However, there are some differences in the respective hemipenes, in the P1 chaetotaxy and Gottwald (1980) did not record whether the seminal vesicles of his specimen were coiled within the duplicature as is the case in *Bonaducecythere*. Reference to more Galapagos material is needed before it can be placed in *Bonaducecythere*. If this were done, then *Psammocythere hartmanni* Gottwald, 1980, would become a junior homonym of *Bonaducecythere hartmanni* McKenzie, 1977.

On shell characters, *Bonaducecythere* is easily separated from *Psammocythere* which is broadly rounded both anteriorly and posteriorly and has a cigar-like shape (Klie 1938:214, figs 733, 734). However, it does share several characters of the soft anatomy, notably, 6-segmented antennules with identical chaetotaxy; 3-segmented antennal exopods; mandible epipods with a reduced (1-2) number of Strahl(en); maxillae with reduced epipods, bearing 2-3 downward pointing setae; strongly dimorphic P1s, with the terminal ungues being curved and club-shaped in males; and slender P2s and P3s with 4-segmented endopods. No other cytheracean family has this complex of characters (Hartmann and Puri 1974). Therefore, Bonaducecytheridae should be considered a junior synonym of Psammocytheridae.

Psammocytheridae are now held to include at least *P. remanei* Klie, 1936; *P. hartmanni* Gottwald, 1980; and *B. hartmanni* McKenzie, 1977—from Helgoland, Galapagos and the Mediterranean respectively. There are two Mediterranean records for *Bonaducecythere*—that by McKenzie (1977) from Malta; and an earlier record of n. gen., n. sp. from the island of Naxos, Greece, which, although not described, was sufficiently well illustrated (Barbeito-Gonzales 1971, Plate 43b) to identify it with *B. hartmanni*.

The preferred habitats for these three small ostracode species are all interstitial.

Literature Cited

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Note: Recently, Gottwald (1983) renamed *T. hartmanni* Gottwald, 1980, as *P. santacruzensis* Gottwald, 1983. For the reasons given above, this species becomes *Bonaducecythere santacruzensis* (Gottwald 1983).

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